



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0561; Directorate Identifier 2014-NE-12-AD]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce plc Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede airworthiness directive (AD) 2015-04-03 that applies to certain Rolls-Royce plc (RR) RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines. AD 2015-04-03 requires inspection of the sealing sleeve on the high-pressure/intermediate-pressure (HP/IP) turbine support internal oil feed tube and removal of those sealing sleeves affected by AD 2015-04-03. This proposed AD would require removal of either the affected sealing sleeve only or both the affected sealing sleeve and the oil feed tube. We are proposing this AD to prevent failure of the HP/IP turbine support internal oil feed tube, which could lead to uncontained engine failure and damage to the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, DE24 8BJ, United Kingdom; phone: 011-44-1332-242424; fax: 011-44-1332-249936; email: http://www.rolls-royce.com/contact/civil_team.jsp; Internet: <https://customers.rolls-royce.com/public/rollsroycecare>. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2014-0561; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the mandatory continuing airworthiness information, regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2014-0561; Directorate Identifier 2014-NE-12-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On February 11, 2015, we issued AD 2015-04-03, Amendment 39-18105 (80 FR 9380, February 23, 2015), for certain RR RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines. AD 2015-04-03 requires inspection of the sealing sleeve on the HP/IP turbine support internal oil feed tube and removal of those sealing sleeves affected by AD 2015-04-03. AD 2015-04-03 resulted from fractures of the HP/IP turbine support internal

oil feed tube. We issued AD 2015-04-03 to prevent failure of the HP/IP turbine support internal oil feed tube, which could result in uncontained engine failure and damage to the airplane.

Actions Since AD 2015-04-03 Was Issued

Since we issued AD 2015-04-03, Amendment 39-18105 (80 FR 9380, February 23, 2015), we received a report of high oil consumption on an engine that did not have an affected sealing sleeve. The manufacturer's investigation revealed that certain oil feed tube threaded end adapters were manufactured with the outer diameter larger than the drawing maximum, which can cause binding of the sliding joint and ultimately lead to low-cycle fatigue failure of the HP/IP turbine support internal oil feed tube. Also since we issued AD 2015-04-03, the European Aviation Safety Agency has issued AD 2015-0105R1, dated August 18, 2015, which requires inspection of the affected sealing sleeve and removal of the affected sealing sleeve or removal of both the affected sealing sleeve and oil feed tube.

Related Service Information under 1 CFR Part 51

RR has issued RR Alert Non-Modification Service Bulletin (NMSB) No. RB.211-72-AJ035, Revision 2, dated August 10, 2015 and RR Service Bulletin (SB) No. RB.211-72-H754, dated October 1, 2014. The Alert NMSB No. RB.211-72-AJ035, Revision 2, dated August 10, 2015, provides guidance on identification of the sealing sleeve, part number (P/N) FW15003, and replacement of the non-conforming sealing sleeve, P/N FW15003, with a conforming sealing sleeve, P/N FW15003. The SB No. RB.211-72-H754, dated October 1, 2014, provides information on the replacement of the sealing sleeve, P/N FW15003, and oil feed tube, P/N FW14193, with a sealing sleeve, P/N

KH28323 and oil feed tube, P/N KH28324. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

FAA's Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require removal of the affected sealing sleeve only or both the affected sealing sleeve and the oil feed tube. Both corrective actions eliminate the unsafe condition caused by affected sealing sleeves and/or affected oil feed tube threaded end adapters.

Costs of Compliance

We estimate that this proposed AD affects 58 engines installed on airplanes of U.S. registry. We also estimate that it would take about 1.2 hours per engine to comply with this proposed AD. The average labor rate is \$85 per hour. Required parts cost approximately \$5,850 per engine. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$345,216.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2015-04-03, Amendment 39-18105 (80 FR 9380, February 23, 2015) (“AD 2015-04-03”), and adding the following new AD:

Rolls-Royce plc: Docket No. FAA-2014-0561; Directorate Identifier 2014-NE-12-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2015-04-03.

(c) Applicability

This AD applies to Rolls-Royce plc (RR) RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines, all serial numbers, except those engines:

(1) that have had Modification 72-H754 applied in production, or

(2) that have been modified in accordance with RR Service Bulletin (SB) No.

RB.211-72-H754, dated October 1, 2014, or

(3) with sealing sleeve, part number (P/N) FW15003, with markings 102013, 112013, or 102013L.

(d) Unsafe Condition

This AD was prompted by fractures of the high-pressure/intermediate pressure (HP/IP) turbine support internal oil feed tube. We are issuing this AD to prevent failure of the HP/IP turbine support internal oil feed tube, which could result in uncontained engine failure and damage to the airplane.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) If sealing sleeve, P/N FW15003, is installed without markings 102013, 112013, or 102013L, or if the markings cannot be sufficiently identified, then within 1,600 flight cycles or 24 months after the effective date of this AD, whichever occurs first:

(i) Remove the affected sealing sleeve, P/N FW15003, and replace it with a sealing sleeve eligible for installation. Use paragraph 3.A.(4)(b) of RR Alert Non-Modification Service Bulletin (NMSB) No. RB.211-72-AJ035, Revision 2, dated August 10, 2015, to perform the part replacement, or,

(ii) Remove the affected sealing sleeve, P/N FW15003, and the oil feed tube, P/N FW14193, and replace with parts eligible for installation. Use paragraph 3.B. or 3.C., as appropriate, of RR SB No. RB.211-72-H754, dated October 1, 2014, to perform the parts replacement.

(2) Reserved.

(f) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs to this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

(g) Related Information

(1) For more information about this AD, contact Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2015-0105R1, dated, August 18, 2015, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2014-0561>.

(3) RR Alert NMSB No. RB.211-72-AJ035, Revision 2, dated August 10, 2015 and RR SB No. RB.211-72-H754, dated October 1, 2014, can be obtained from RR, using the contact information in paragraph (g)(4) of this AD.

(4) For service information identified in this AD, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, DE24 8BJ, United Kingdom; phone: 011-44-1332-242424; fax: 011-44-1332-249936; email: http://www.rolls-royce.com/contact/civil_team.jsp; Internet: <https://customers.rolls-royce.com/public/rollsroycecare>.

(5) You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on November 2, 2015.

Colleen M. D'Alessandro,
Directorate Manager, Engine & Propeller Directorate,
Aircraft Certification Service.
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